

CLAIMS

- 1 A method for the degradation of lignocellulosic material by applying to the material an enzyme composition which is a mixture comprising at least a cellulase,
5 xylanase and ligninase, and optionally other enzymes, to solubilise or decompose the material at least partially.
2. A method according to claim 1 in which the enzyme composition further includes a protease, lipase, urease, uricase, and/or pectinase
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3. A method of removing a biological deposit from a surface or location on or in which it is undesirably deposited, by applying to the deposit an enzyme composition which is a mixture comprising at least a cellulase, xylanase and ligninase to solubilise or decompose the deposit.
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4. A method according to claim 3 in which the deposit is human or animal faeces and the enzyme composition comprises a protease, lipase, urease, cellulase, xylanase and ligninase
- 20 5. A method according to claim 3 in which the deposit is bird droppings and the enzyme composition comprises a uricase, cellulase, xylanase and ligninase
6. A method according to claim 3 in which the deposit is leaves and the enzyme composition comprises a pectinase, cellulase, xylanase and ligninase
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7. A method according to any one of claims 1 to 6 in which the enzyme composition is a mechanical blend of the enzymes.
8. A method according to any one of claims 1 to 6 in which the enzyme
30 composition includes an enzyme mixture obtainable by cultivating a fungus selected from the class of White Rot Fungi in a liquid growth medium and harvesting the enzymes produced by the fungus from the liquid growth medium.

9. A method according to claim 8, in which the fungus is cultivated in the presence of dung or a dung extract as an auxiliary growth medium.

5 10. An enzyme composition useful to solubilise or decompose a biological deposit.
which is a enzyme mixture comprising at least a cellulase, xylanase and ligninase, and
at least one other enzyme selected from a protease, lipase, urease, uricase, and
pectinase.

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11. A composition according to claim 10 in which the deposit is human or animal
faeces and the enzyme composition comprises a protease, lipase, urease, cellulase,
xylanase and ligninase

15 12. A composition according to claim 10 in which the deposit is bird droppings
and the enzyme composition comprises a uricase, cellulase, xylanase and ligninase

13. A composition according to claim 10 in which the deposit is leaves and the
enzyme composition comprises a pectinase, cellulase, xylanase and ligninase

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14. A composition according to any one of claims 10 to 13 in which the enzyme
composition includes an enzyme mixture obtained by cultivating a fungus selected
from the class of White Rot Fungi in a liquid growth medium and harvesting the
enzymes produced by the fungus from the liquid growth medium.

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15. A composition according to claim 14, in which the fungus is cultivated in the
presence of dung or a dung extract as an auxiliary growth medium.

16. A composition according to claim 15 in which the fungus is selected from the
30 family *Polyporaceae*.

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17. A composition according to claim 15 or 16, in which the enzyme mixture includes cellulase, xylanase and laccase enzymes.
18. A composition according to claim 17 in which the fungus is selected from the species *Coriolus*, *Pleurotus* and *Ganoderma*.
19. A composition according to claim 16 in which the fungus is selected from *Coriolus versicolor*, *Pleurotus ostreatus* and *Ganoderma applanatum*.
20. A composition according to claim 15, in which the enzyme mixture includes cellulase, xylanase and lignin peroxidase enzymes.
21. A composition according to claim 20 in which the fungus is selected from the species *Phanerochaete*.
22. A composition according to claim 21 in which the fungus is *Phanerochaete chrysosporium*.
23. A composition according to any one of claims 14 to 22 in which, after a suitable growth period, residues are removed from the nutrient medium by filtration, and the enzyme mixture is harvested, and then dried.
24. A composition according to claim 23 in which the enzyme mixture is freeze-dried or spray-dried.

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